## This Page Is Inserted by IFW Operations and is not a part of the Official Record

## BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

## IMAGES ARE BEST AVAILABLE COPY.

As rescanning documents will not correct images, please do not report the images to the Image Problem Mailbox.







UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 Www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/760,324	01/12/2001	Joseph Kevin Gogerty	PP4811USO PHI 1320	2686
7:	590 02/27/2002			
Heidi S. Nebel			EXAMINER	
Zarley, McKee, Thomte, Voorhees & Sease Suite 3200			FOX, DAVID T	
801 Grand Avenue Des Moines, IA 50309-2721			ART UNIT	PAPER NUMBER
			1638	3
			DATE MAILED: 02/27/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.  Applicant(s)				
Office Action Summary	Examiner Group Art Unit				
	Fox 1638				
—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—					
Peri d for Reply					
Peri d for Reply  A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIREMONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.					
<ul> <li>Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.</li> <li>If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.</li> <li>Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).</li> </ul>					
Status					
☐ Responsive to communication(s) filed on					
☐ This action is FINAL.					
☐ Since this application is in condition for allowance except for formal matters, <b>prosecution as to the merits is closed</b> in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 1 1; 453 O.G. 213.					
Disp sition of Claims					
Claim(s) 1-32	is/are pending in the application.				
	is/are withdrawn from consideration.				
□ Claim(s)	is/are allowed.				
Claim(s)1-32_	is/are rejected.				
□ Claim(s)					
☐ Claim(s)	are subject to restriction or election				
Application Papers					
☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.					
☐ The proposed drawing correction, filed on is ☐ approved ☐ disapproved.					
☐ The drawing(s) filed on is/are objected to by the Examiner.					
☐ The specification is objected to by the Examiner.					
☐ The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. § 119 (a)-(d)					
<ul> <li>□ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 11 9(a)-(d).</li> <li>□ All □ Some* □ None of the CERTIFIED copies of the priority documents have been</li> <li>□ received.</li> </ul>					
☐ received in Application No. (Series Code/Serial Number) ☐ received in this national stage application from the International Bureau (PCT Rule 1 7.2(a)).					
*Certified copies not received:					
Attachm nt(s)	7				
☑Information Disclosure Statement(s), PTO-1449, Paper No(s	s) ☐ Interview Summary, PTO-413				
. ☑ Notice of Reference(s) Cited, PTO-892	☐ Notice of Informal Patent Application, PTO-152				
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948	☐ Other				
S Patent and Trademark Office BEST AVAILABLE COPY					

U. S. Patent and Trademark Office PTO-326 (Rev. 9-97)

Part of Paper No. \_\_\_\_3

41 C CDC- 4000 454 45710750F

Art Unit: 1638

Page 7 of the specification and Claims 1, 5 and 7 are objected to for their inclusion of blanks "

". It is understood that the blanks will be replaced with deposit accession numbers.

Applicant's statement on page 50 of the specification regarding his intent to deposit the claimed maize hybrid seed in compliance with 37 CFR 1.801-1.809 is acknowledged.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 8, 10-12, 14-16, 18, 19, 21, 23-25, 27-29 and 31-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 is indefinite in its recitation of "the...protoplasts" which lacks antecedent basis in claim 5 on which it depends. The following amendment would obviate this rejection:

In claim 6, line 1, delete "the" before "cells" and insert -- of the tissue culture-- after "protoplasts".

Claims 8 and 21 are indefinite in their recitation of "[t]he maize plant of claim 2 [or 20] wherein said plant is male sterile", which is confusing, since the plant of claim 2 or claim 20 is male fertile. The following amemendments would obviate this rejection:

In claims 8 and 21, replace "wherein said plant is male sterile" with --, further comprising a genetic factor conferring male sterility--

Art Unit: 1638

Claims 10, 14, 18, 23, 27 and 31 are indefinite in their recitation of "[t]he maize plant breeding program of claim 9 [or 13 or 17 or 22 or 26 or 30]" which is confusing, since the preceding claims are drawn to methods rather than breeding programs. The following amendments would obviate this rejection:

In claims 10, 14, 18, 23, 27 and 31, line 1, replace "maize plant breeding program" with -- method--.

Claims 12, 16, 25 and 29 are indefinite in their recitation of "hybrid maize plant according to claim 2 [or 20]" which lacks antecedent basis in the claims from which they depend. Deletion of "hybrid" before "maize" in line 1 of claims 12, 16, 25 and 29 would obviate this rejection.

Claims 11, 15, 19, 24, 28 and 32 are indefinite in their recitation of "high", "above average", "very good", "stronger", and "suited", which are unduly narrative and imprecise and do not clearly specify the degree of expression of the claimed trait, and so do not clearly characterize the claimed maize plant.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1638

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11, 15, 19, 24, 28 and 32 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cummings et al (U.S. 5,977,455).

The claims are drawn to a maize plant exhibiting at least two traits which are exhibited by hybrid 34N16 such as high yield and suited to the Central region of the corn belt of the United States, wherein said maize plant has at least one ancestor which is 34N16, wherein neither the number of generations of crossing nor the identity of the other parents in each cross are specified.

Cummings et al teach a maize plant developed in Iowa with high yield and suited to the Central region of the corn belt of the United States (see, e.g., Table 20, columns 33-34; columns 33-34, lines 47-67; columns 59-60, Table 32; columns 64-65, Table 37). The maize plant taught by the reference differs from the claimed maize plant only in its derivation by a method in which 34N16 was a parent in a single cross. However, the process of producing the claimed maize plant would not distinguish it from the prior art maize plant, particularly in view of the loss of 34N16-derived genetic material with each outcross to a non-34N16 parent and with each generation of such crossing, and given the failure of the claimed individual traits to be unique to 34N16. See *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985), which teaches that a product-by-process claim

Art Unit: 1638

may be properly rejectable over prior art teaching the same product produced by a different process, if the process of making the product fails to distinguish the two products.

Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cummings et al (U.S. Patent 5,977,455).

The claims are drawn to a hybrid maize plant exhibiting all of the characteristics of 34N16, and methods for breeding and propagating it.

Cummings et al teach a hybrid Dent maize plant with very dark anthocyanin in the brace roots, green glumes, red silks, red cobs, curved row direction, and yellow endosperm (see, e.g., columns 64-65, Table 37), wherein the plant was derived by crossing other breeding lines exhibiting desirable traits, and wherein tissue culture or genetic engineering could be used to propagate and further improve the hybrid, respectively (see, e.g., column 33-34, lines 47-67; column 41, line 15 through column 54, line 50).

Cummings et al do not teach a hybrid maize plant with absent sheath pubescence, dark green leaves, pink anthers, or pendant ears.

It would have been obvious to one of ordinary skill in the art to utilize the hybrid maize plant taught by the reference, and to modify that plant by crossing with other breeding lines to incorporate other desirable agronomic traits, as suggested by the reference.

No claim is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is (703) 308-0280. The examiner can normally be reached on Monday through Friday from 10:30AM to 7:00PM.

Art Unit: 1638

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amy Nelson, can be reached on (703) 306-3218. The fax phone number for this Group is (703) 872-9306. The after final fax phone number is (703) 872-9307.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0196.

February 24, 2002

DAVID T. FOX PRIMARY EXAMINER

Jeine 7. W